REMARKS

Applicants gratefully acknowledge the telephonic interview granted by the Examiner on August 3rd, 2005 with Applicants' representative, Jonathan Hallman. In that interview, the Examiner indicated that the use of "encoding" in claim 1 raised a written description issue. Although Applicants do not acquiesce that the use of "encoding" raises such issues, they agreed to replace "encoding" with "representing." Applicants gratefully acknowledge the Examiner's indication that such a change would alleviate the written description issue.

In addition, the Examiner indicated in the interview that the "information field" should be limited to better define what this field is. In that regard, Applicants have amended claim 1 so that the information field "includes at least address information." As discussed during the interview, Applicants have abundant written support for such a change – for example, Figure 8 and its accompanying description in the specification disclose the "physical sector address" part of the information field.

In light of the amendment to claim 1, claim 36 was also amended accordingly.

Applicants have invented an optical disk wherein high frequency wobble marks (HFWMs) are used to encode an information field. As set forth by the Applicants, for example, on page 4, lines 19 through 22, the presence or absence of a HFWM denotes an active or an inactive bit. For example, the presence of a HFWM may represent a logical 1 whereas the absence of a HFWM denotes a logical 0. The resulting binary code may be decoded to recover whatever information was encoded by the HFWMs. For example, as set forth on page 9, lines 17 through 24, the HFWMs may be used to encode physical sector information (address information) as well as error correction codes.

To summarize: the key to the invention is that the HFWMs are used to encode information such as address information. In the prior art, HFWMs were merely used as timing marks. Thus, no information can be encoded by such a use: the HFWMs merely would appear at a constant interval. A prime example of such prior art is the Asano reference (EP 0969452). In that regard, Applicants are baffled by the citation of Figure 6a in Asano as somehow demonstrating the use of HFWMs to encode an information field: Figure 6a in Asano is simply referring to the conventional encoding of the information layer (also known as the recording layer) on the disk – in any writable optical disk, one can write an information

field to the recording layer to encode the content one is interested in – for example, files, videos, pictures, music, etc. Asano makes it explicit that Figure 6a is simply referring to such ordinary use of the recording layer: paragraph [0030] begins by stating "information shown in Fig. 6A is magnetically recorded on optical disk 100." In contrast, the HFWMs are physical wobbles of the groove; they cannot possibly be involved with magnetic recording of information.

Thus, as previously stated in the last response filed 8/18/04, Asano simply uses the HFWMs as timing marks: see, e.g., paragraph [0019] which states "address marks 2 [the HFWMs] are formed intermittently along the track direction at a constant interval." That these HFWMs are simply timing marks is also borne out in the claims of Asano – see, e.g, the preamble of claim 5, which states in pertinent part "a relatively abrupt second waveform [the HFWM] is overlapped at a constant interval." Thus, the HFWM simply repeats at these intervals as the disk is spun, helping the disk drive maintain timing.

The other Asano reference (USP 6,621,772) is no different: consider, for example, Col. 6, lines 29-53. There, Asano describes that the address marks in the address segment "are recorded on grooves 30 and 3E as well as lands 4E and 40." Thus, the wobbles only identify the address segment, they do not encode information. Instead, address information is encoded on the lands and grooves of the recording layer in the conventional fashion. The same thing holds for Figure 11: As stated in Col. 10, lines 11-14 (in conjunction with describing Figure 11): "Addresses 1 and 2 are identified in accordance with address marks shown in FIG. 11. The manner of this identification is the same as that already described in connection with embodiment 1." (emphasis added).

Accordingly, Asano makes no teaching or suggestion for the information field recited in claim 1. Thus, claim 1 is patentable over the art of record

Because claims 2 – 10, and 36 depend either directly or indirectly upon claim 1, they are patentable over the art of record for at least the same reasons.

CONCLUSION

For the above reasons, pending Claims 1 – 10, and 36 are in condition for allowance and allowance of the application is hereby solicited. If the Examiner has any questions or concerns, a telephone call to the undersigned at (949) 752-7040 is welcomed and encouraged.

Certification of Facsimile Transmission
I hereby certify that this paper is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Saundra Carr August 4, 2005
Saundra Carr Date of Signature

Respectfully submitted,

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